



TUFTS UNIVERSITY

**Tufts New England Medical Center Hospitals Program
Tufts New England Medical Center Hospitals
Lemuel Shattuck Hospital**



Transitional Year Residency Program

Educational Goals and Objectives for Gastroenterology

Location: Tufts-New England Medical Center

Lahey Clinic

Lemuel Shattuck Hospital/Faulkner Brigham & Women's Hospitals

Type of Rotation: Elective

Length of Rotation: 4 weeks

Teaching Goals

The following curriculum is an organ-specific outline, which the resident may use to organize his or her study of a particular disease entity seen on the rotation.

Diseases of the Esophagus

- 1) To gain an understanding of the pathophysiology of gastroesophageal reflux disease (GERD)
- 2) To become familiar with the myriad presenting symptoms of GERD
- 3) To develop an understanding of the various diagnostic modalities used in the diagnosis of GERD
- 4) To understand the stepwise approach for the management of GERD, from lifestyle modification and over-the-counter antacids to laparoscopic fundoplication
- 5) To gain an understanding of the pathophysiology of swallowing disorders
- 6) To develop an understanding of the various diagnostic modalities used in the diagnosis of dysphagia

Diseases of the Stomach and Duodenum

- 1) To understand the pathogenesis of peptic ulcer disease caused by *Helicobacter pylori* infection and (NSAIDs)
- 2) To become familiar with the presenting signs and symptoms of peptic ulcer disease (bleeding, perforation, obstruction)
- 3) To refine knowledge and grasp the importance of general medical resuscitation in the management of upper GI bleeding
- 4) To understand the role of upper endoscopy for diagnosis, prognosis and therapy in the management of upper GI bleeding
- 5) To understand the pathogenesis, diagnosis and therapy for celiac disease

Diseases of the Pancreas

- 1) To familiarize oneself with the models of pathogenesis of acute and chronic pancreatitis
- 2) To grasp the differential diagnosis of acute pancreatitis
- 3) To refine knowledge of the management of acute pancreatitis, particularly in regards to distinguishing between interstitial and necrotizing pancreatitis, and to understand the role of computed tomography (CT) scan in making this distinction and guiding treatment
- 4) To familiarize oneself with the presenting signs and symptoms of adenocarcinoma of the pancreas
- 5) To develop an understanding of the theories of the pathogenesis of chronic pancreatitis
- 6) To become familiar with the medical and surgical management of chronic pancreatitis
- 7) To understand the roles of the various modalities in the diagnosis and staging of adenocarcinoma of the pancreas

- 8) To become familiar with endoscopic palliation in pancreatic adenocarcinoma

Diseases of the Liver

- 1) To become more comfortable with the differential diagnosis of elevated liver function tests (LFTs)
- 2) To improve proficiency in the evaluation of the patient with elevated LFTs
- 3) To become familiar with the diagnosis, staging and therapy of chronic hepatitis C infection (HCV)
- 4) To understand the various modalities used in the diagnosis of cirrhosis
- 5) To become more comfortable in the management of cirrhosis and its complications (bleeding, infection and encephalopathy)
- 6) To become familiar with the pathogenesis of alcoholic liver diseases and understand the disease spectrum of alcoholic liver disease (fatty liver, alcoholic hepatitis, cirrhosis)

Diseases of the Biliary Tree

- 1) To become familiar with the pathophysiology and presenting signs and symptoms of biliary colic from cholelithiasis and choledocholithiasis
- 2) To understand the difference in liver chemistries between uncomplicated biliary colic, acute cholecystitis and choledocholithiasis
- 3) To understand the role of endoscopic retrograde cholangio-pancreatography (ERCP) in the management of choledocholithiasis
- 4) To become familiar with the role of ERCP in the management of gallstone pancreatitis
- 5) To understand the role of cholecystectomy in the management of these disorders
- 6) To familiarize oneself with the epidemiology and pathogenesis of cholangiocarcinoma
- 7) To understand the presenting signs and symptoms of cholangiocarcinoma
- 8) To understand the roles of surgery, endoscopy and interventional radiology in the management of cholangiocarcinoma

Diseases of the Colon

- 1) To develop some familiarity with colorectal carcinoma pathogenesis and epidemiology
- 2) To understand the importance of colorectal cancer screening and the various screening strategies that is utilized by primary care physicians and gastroenterologists
- 3) To understand clearly the utility of colonoscopy in colorectal polyp detection, removal and surveillance
- 4) To understand the pathogenesis of diverticular disease (diverticulitis and bleeding diverticula)
- 5) To become familiar with the broad spectrum of clinical presentations of symptomatic diverticular disease, from pain to diverticular abscess with sepsis
- 6) To understand the fundamental differences in histopathology, clinical presentation and treatment between ulcerative colitis and Crohn's disease
- 7) To become familiar with the medical and surgical management of ulcerative colitis and Crohn's disease, including the various roles of topical vs. systemic therapy, 5-ASA drugs, and immunosuppression
- 8) To refine one's knowledge of the differential diagnosis of lower GI bleeding, and to review the importance of general resuscitation in lower GI bleeding
- 9) To understand the importance of a multidisciplinary approach to the management of lower GI bleeding, grasping the roles of gastroenterology/endoscopy, radiology/angiography and surgery

Basic Principles of Endoscopy

- 1) To acquire an overview of the practice of endoscopy
- 2) To understand the most common indication for upper endoscopy and colonoscopy
- 3) To understand the diagnostic and therapeutic role of endoscopy in GI bleeding
- 4) To become familiar with contraindications and complications related to endoscopic procedures

Principle Educational Goals Based on the ACGME General Competencies

In the tables below, the principle educational goals of the Gastroenterology curriculum are listed for each of the six ACGME competencies:

- 1) Patient Care
- 2) Medical Knowledge

- 3) Practice-Based Learning and Improvement
- 4) Interpersonal and Communication Skills
- 5) Professionalism
- 6) Systems-Based Practice

1) Patient Care

Objective	Learning Environment	Evaluation Method
Perform a comprehensive history and physical with particular attention to the GI tract	Consult rounds	Monthly evaluation Small group participation with GI fellows
Formulate a management plan	Consult rounds	Monthly evaluation Small group participation
Clearly document patient management in the medical record	Consult rounds	Monthly evaluation

2) Medical Knowledge

Objective	Learning Environment	Evaluation Method
Recognize GI symptom history	Consult rounds Assigned readings	Monthly evaluation Small group participation
Use diagnostics appropriately	Consult rounds	Monthly evaluation Small group participation
Recognize major GI diseases	Consult rounds	Monthly evaluation Small group participation
Use diagnostic and therapeutic endoscopy appropriately	Consult rounds	Monthly evaluation Small group participation
Recognize the unstable patient and appropriate triage	Consult rounds	Monthly evaluation Small group participation

3) Practice-based Learning and Improvement

Objective	Learning Environment	Evaluation Method
Be able to perform a literature search to answer clinical questions	Consult rounds	Monthly evaluation Small group participation
Be able to interpret laboratory and radiologic data	Consult rounds	Monthly evaluation Small group participation
Facilitate team member education	Consult rounds	Monthly evaluation Small group participation

4) Interpersonal and Communication Skills

Objective	Learning Environment	Evaluation Method
Communicate a plan of action and follow-up effectively to patients and other team members	Consult rounds	Monthly evaluation Small group participation
Communicate potential risks of endoscopic therapy	Consult rounds	Monthly evaluation
Relate endoscopic findings to other team members	Consult rounds	Monthly evaluation Small group participation

5) Professionalism

Objective	Learning Environment	Evaluation Method
Interact with patients, colleagues and hospital staff in a respectful manner	Consult rounds	Monthly evaluation Small group participation
Maintain patient confidentiality and HIPAA guidelines	Consult rounds	Monthly evaluation Small group participation

6) Systems-Based Practice

Objective	Learning Environment	Evaluation Method
Mobilize floor or ICU for appropriate management of hemodynamically unstable patients	Consult rounds	Monthly evaluation
Work with fellows and staff as part of an interdisciplinary team	Consult rounds	Monthly evaluation Small group participation

Gastroenterology Curriculum Checklist

Acute abdomen
Acute appendicitis
Ascites
Diarrhea
Acute
Chronic
Gastroesophageal reflux disease (GERD)
Uncomplicated GERD
Esophageal stricture
Barrett's esophagus
Gastrointestinal bleeding
Lower
Occult
Upper
Inflammatory bowel disease
Intestinal disorders
Diverticulitis

Hemorrhoids
Irritable bowel syndrome
Diverticular abscess
Malabsorption
Mesenteric vascular disease
Malnutrition
Motility disorders
Esophagus
Colon
Gastroparesis
Small intestine
Neoplasm
Cancer (including hepatobiliary)
Colonic polyps
Peptic ulcer disease
Bleeding ulcer
Helicobacter gastritis
Uncomplicated ulcer
Perforation, obstruction
Peritoneal disease
Biliary tract disease
Acute cholecystitis
Biliary obstruction
Cholelithiasis
Cholangitis
Cholestatic liver disease
Primary biliary cirrhosis
Primary sclerosing cholangitis
Cirrhosis (including complications)
Hepatitis
Drug-induced
Viral
Infiltrative liver diseases
Other acquired
Inherited
Metabolic
Pancreatitis
Acute
Chronic